

hR1Z	60	ATETLA	EVPE	HVLRCL	PEEV	RLFPSA	VDKT	RIGWAT	KPI	LKCKK	FGPFV
rR1Z	59	ATETLA	EVPE	HVLRCL	PEEV	RLFPSA	VDKT	RIGWAT	KPI	LKCKK	FGPFV
Consensus	60	ATETLA	EVPE	HVLRCL	PEEV	RLFPSA	VDKT	RIGWAT	KPI	LKCKK	FGPFV
hR1Z	120	PNLWMC	IDA	TOPEKN	WLR	YVMACS	GEE	QNLFP	LEINR		
rR1Z	119	PNLWMC	IDA	TOPEKN	WLR	YVMACS	GEE	QNLFP	LEINR		
Consensus	120	PNLWMC	IDA	TOPEKN	WLR	YVMACS	GEE	QNLFP	LEINR		
hR1Z	180	APGEELL	VWY	NGEDNP	EIAA	AIEEER	ASAR	SKRSS	PKSRK		
rR1Z	179	APGEELL	VWY	NGEDNP	EIAA	AIEEER	ASAR	SKRSS	PKSRR		
Consensus	180	APGEELL	VWY	NGEDNP	EIAA	AIEEER	ASAR	SKRSS	PKSRK		
hR1Z	240	KQNKIQ	IDL	SAEGPK	ED	EP	ASA	EQPA	LEEV	AS	EV
rR1Z	239	KQNKIQ	IDL	SAEGPK	ED	EP	ASA	EQPA	LEEV	AS	EV
Consensus	240	KQNKIQ	IDL	SAEGPK	ED	EP	ASA	EQPA	LEEV	AS	EV
hR1Z	300	CEVND	CEEE	EEEE	EEEE	EEEE	EEEE	EEEE	EEEE	EEEE	EEEE
rR1Z	295	CEVND	CEEE	EEEE	EEEE	EEEE	EEEE	EEEE	EEEE	EEEE	EEEE
Consensus	300	CEVND	CEEE	EEEE	EEEE	EEEE	EEEE	EEEE	EEEE	EEEE	EEEE
hR1Z	360	KEPEI	ROCKP	EDLL	EEPT	SE	ED	SE	VT	PA	MO
rR1Z	355	KEPEI	ROCKP	EDLL	EEPT	SE	ED	SE	VT	PA	MO
Consensus	360	KEPEI	ROCKP	EDLL	EEPT	SE	ED	SE	VT	PA	MO

FIGURE 1A

hR1Z	PCQHCKRKFT	TKQGLERHMH	IHIST	NHAF	KCKYCGK	FC	TQINRRRHER	RHE	GLKR	P	420				
rR1Z	PCQHCKRKFA	TKQGLERHMH	IHIST	NHAF	KCKYCGK	FC	TQINRRRHER	RHE	GLKR	P	415				
Consensus	PCQHCKRKFT	TKQGLERHMH	IHIST	NHAF	KCKYCGK	FC	TQINRRRHER	RHE	GLKR	P	420				
hR1Z	STLQSED	ADGRAS	GENV	PSKD	SSPPS	LC	DCLI	NS	ESQ	TINS	SV	480			
rR1Z	STLQSEDP	EDGX	GENV	PSKD	SSPPQ	LC	DCLI	NS	ESQ	EVINS	SV	473			
Consensus	STLQSED	DGX	GENV	SKD	SSPP	LC	DCLI	NS	ESQ	NS	SV	480			
hR1Z	ELHPCKYCKK	VFGTHTNMRR	HQRRVHERHL	IPKGVRRKGG	LEE	POPPAE	QA	DA	QNVV		539				
rR1Z	ELHPCKYCKK	VFGTHTNMRR	HQRRVHERHL	IPKGVRRKGG	LEE	POPPAE	QA	PPS	QNVV		533				
Consensus	ELHPCKYCKK	VFGTHTNMRR	HQRRVHERHL	IPKGVRRKGG	LEE	POPPAE	QA	QNVV			540				
hR1Z	PSTEPEEEGE	DDVYIMDIS	SNISENLNY	IDGKIQTNN	TSNCDVIEHE	SS	SA	LYGIN			599				
rR1Z	PSTEPEEEGE	DDVYIMDIS	SNISENLNY	IDGKIQTNS	TSNCDVIEHE	SS	SA	LYCID			593				
Consensus	PSTEPEEEGE	DDVYIMDIS	SNISENLNY	IDGKIQTN	TSNCDVIEHE	S	SA	LYGI			600				
hR1Z	CLLTPVTVEI	TONIK	TQVP	VT	DL	REPL	QSTN	SE	KKR	RTASPP	LPK	IK	ET	SDPH	659
rR1Z	CLLTPVTVEI	TONIK	TQVS	VT	DL	MDSP	SSTN	SE	KKR	RTASPP	LPK	IK	ET	ESDST	653
Consensus	CLLTPVTVEI	TONIK	TOV	VT	DL	M	STN	SE	KKR	RTASPP	LPK	IK	ET	SD	660
hR1Z	VPSCSLSLPL	SIST	EVVSF	HKEK	EVYLS	KLKQLLOTQD	KL	T	PAC	ISA	TE	IP	KLGPVC		719
rR1Z	VPSCSLSLPL	SIST	EVVSF	HKEK	EVYLS	KLKQLLOTQD	KL	T	PAC	ISA	TE	IP	KLGPVC		713
Consensus	VPSCSLSLPL	SIST	EVVSF	HKEK	EVYLS	KLKQLLOTQD	KL	T	PAC	ISA	TE	IP	KLGPVC		720

FIGURE 1B

FIGURE 1C

hR1Z	LSA	SSVSS	CONLEASLP	ISFKQEE	EN	EGLKPEEPQ	SAREQDVVQ	ETFN	KNF	CN	1138	
rR1Z	LSA	SSVSS	CONLEASLP	VTFKQEE	ES	EGLKPEEP	PACQCS	VVQ	ETFE	KNF	CN	1126
Consensus	LSA	SSVSS	CONLEASLP	FKQEE	E	EGLKPEEE	AQ	VVQ	ETF	KNF	CN	1140
hR1Z	VCES	PFLSIK	DLTKHLS	HA	EEWPFKCEFC	VOLF	KXTDL	SEHRFL	LHGV	GNIFVCSVCK	1198	
rR1Z	VCES	PFLSIK	DLTKHLS	HA	EEWPFKCEFC	VOLF	KXTDL	SEHRFL	LHGV	GNIFVCSVCK	1186	
Consensus	VCES	PFLSIK	DLTKHLS	HA	EEWPFKCEFC	VOLF	KXTDL	SEHRFL	LHGV	GNIFVCSVCK	1200	
hR1Z	KEFA	FLCNLQ	QHORDLHPD	K	VCTHIEFESC	TLRPQNFTDP	SKA	VEHMS	LPE	PLETSK	1258	
rR1Z	KEFA	FLCNLQ	QHORDLHPD	E	VCTHIEFESC	TLRPQNFTDP	SKA	VEHMS	LPE	PLETSR	1246	
Consensus	KEFA	FLCNLQ	QHORDLHPD		VCTHIEFESC	TLRPQNFTDP	SKA	VEHMS	LPE	PLETS	1260	
hR1Z	EEE	LND	SE	ELYTTIKIMA	SGIKTKDPDV	RLGLNQHYPS	FKPPPFQYHH	RNPMGIGVTA	1318			
rR1Z	EEE	LND	SE	ELYTTIKIMA	SGIKTKDPDV	RLGLNQHYPS	FKPPPFQYHH	RNPMGIGVTA	1305			
Consensus	EEE	LND	SE	ELYTTIKIMA	SGIKTKDPDV	RLGLNQHYPS	FKPPPFQYHH	RNPMGIGVTA	1320			
hR1Z	TNFT	THNIPO	TFTTAIRCTK	CGKGVNDNMP	LHKHILACAS	ASDKKRYTPK	KNPVPLKQTV	1378				
rR1Z	TNFT	THNIPO	TFTTAIRCTK	CGKGVNDNMP	LHKHILACAS	ASDKKRYTPK	KNPVPLKQTV	1365				
Consensus	TNFT	THNIPO	TFTTAIRCTK	CGKGVNDNMP	LHKHILACAS	ASDKKRYTPK	KNPVPLKQTV	1380				
hR1Z	QPKNG	VWVLD	NSGKNAFRM	QPKRL	FEV	EL	KMS	NKL	KL	ALKKKNQ	LVQKAILQKN	1438
rR1Z	QPKNG	VWVLD	NSGKNAFRM	QPKRL	FV	EL	KMS	NKL	KL	ALKKKNQ	LVQKAILQKN	1425
Consensus	QPKNG	VWVLD	NSGKNAFRM	QPKRL	FV	EL	KMS	NKL	KL	ALKKKNQ	LVQKAILQKN	1440

FIGURE 1D

hRIZ	KS	AKQKADLK	NAC	SSSHIC	PYC	REFTYI	GSLNKHAAFS	CPKKPLSP	K	KVSHSSKKK	1498			
rRIZ	RA	AKQKADLR	DT	SSSHIC	PYC	REFTYI	GSLNKHAAFS	CPKKPLSP	K	KVSHSSKKK	1485			
Consensus		AKQKADL		SSSHIC	PYC	REFTYI	GSLNKHAAFS	CPKKPLSP	K	KVSHSSKKK	1500			
hRIZ	CH	SPASSDK	NS	NSNHRRRT	AD	EIKMOS	PLCKTRAR	SECTO	LP	SSSFRS	QNV	1538		
rRIZ	CH	SPASSDR	NS	NSCHRRRT	AD	EIKMOS	PLCKTRAR	SECTO	LP	SSSFRS	QNV	1545		
Consensus	CH	SPASS	NS	NS	RRRT	AD	EIKMOS	PLCKTRAR	S	LP	SSSFRS	QNV	1560	
hRIZ	KFA	ASVKSKK	P	SSSSLRNSS	PIRMAKITHV	EGKKPKAVAK	NSAQLSSK	SR	LHVRVQK	1618				
rRIZ	KFA	ASVKSKK	P	SSSSLRNSS	PIRMAKITHV	EGKKPKAVAK	NSAQLSSK	SR	LHVRVQK	1605				
Consensus	KFA	ASVKSKK	P	SSSSLRNSS	PIRMAKITHV	EGKKPKAVAK	NSAQLSSK	SR	LHVRVQK	1620				
hRIZ	SKAV	QSKST	LASK	RTDRF	NI	KSRERSCG	P	TRSLQLAA	AADLSEN	KRE	D	SAKCE	ELKD	1678
rRIZ	SKAV	QSKTA	LASK	RTDRF	NI	KSRERSCG	P	TRSLQLAA	AADLSEN	KRE	D	SAKCE	ELKD	1665
Consensus	SKAV	QSK	LASK	RTDRF	NI	KSRERSCG	P	TRSLQLAA	AADLSE	RE	D	SA	ELKD	1680
hRIZ	FSYSLRLASR	CS	PPAA	YIT	RQ	IRKVKAA	A	AT	FOGPF	K	E	1719		
rRIZ	FSYSLRLASR	CS	STAA	YIT	RQ	IRKVKAA	A	AT	FOGPF	K	EX	1707		
Consensus	FSYSLRLASR	C	AA	YIT	RQ	IRKVKAA	A	A	FOGPF	K	E	1722		

FIGURE 1E

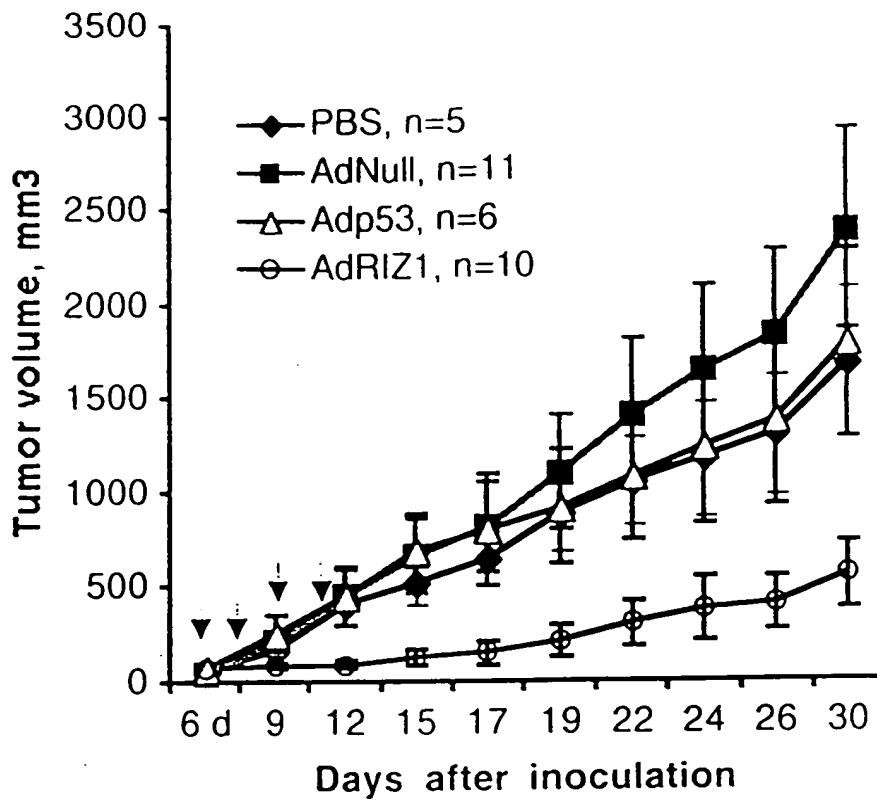


FIGURE 2



FIGURE 3